

## What we heard

*In February and March 2020, the NSW Department of Planning, Industry and Environment (the department) held a fourth series of meetings to discuss drought and water availability issues - this time in the Hunter and North Coast areas.*

The purpose of these meetings was to hear community views on how water should be managed in times of limited supplies and to provide advice on current water availability and water resource outlooks. At the North Coast meetings, with recent improvements in the water supply situation, discussions were about risks to water access during dry periods and how the NSW Government can further support communities through the next drought.

The meetings were held in the Hunter, Richmond and Bellinger River valleys. Details of locations and groups represented at each meeting can be found at the end of this document.

## Key information provided at the meetings

The meetings were run by an independent facilitator and the following information was provided:

- The department provided an update on the water security outlook and an overview of how the NSW Government manages extreme events; drought and poor water quality
- The department outlined the development of regional water strategies
- WaterNSW provided an overview of drought conditions state-wide and specific river valley drought management measures
- Local Land Services provided an overview of their role in drought, flood and fire recovery and managing livestock during difficult conditions.

Copies of or links to the presentations from DPIE-Water and WaterNSW are available on the DPIE website: [www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/drought-update/information-sessions](http://www.industry.nsw.gov.au/water/allocations-availability/droughts-floods/drought-update/information-sessions)

Issues that were raised at each of the public meetings are summarised below.

## More community drought communications

Further communications are planned to be held in 2020 to update the resource availability position and outline any further measures that may need to be implemented.

## Further information

For regular email updates, subscribe to the monthly newsletter and/or water allocation statements: <https://www.industry.nsw.gov.au/media/subscribe>

For regular email updates from WaterNSW, subscribe to the weekly drought update, water availability report and/or other notifications: <https://www.waternsw.com.au/customer-service/news/subscribe>

## Common issues raised

Below is a summary of the common issues raised at the meetings and the response or follow up to occur.

**Table 1. Summary of common issues**

Issue	Response
<p>The focus of the impact of the drought has been west of the divide. There needs to be more recognition that coastal systems are also impacted by drought.</p>	<p>The department is holding these coastal roadshows in acknowledgement that there is a need to develop a better understanding of the impact of drought on coastal river systems.</p> <p>A major difference is how quickly the status of coastal river systems can change compared to inland river systems. The rapid onset of drought can give water users little time to prepare.</p> <p>The regional water strategies currently being developed will identify long term (20-40 year) options for securing a region's water supply.</p> <p>More information on the development of regional water strategies is available on the department's website:  <a href="http://www.industry.nsw.gov.au/water/plans-programs/regional-water-strategies">www.industry.nsw.gov.au/water/plans-programs/regional-water-strategies</a></p>
<p>In some areas water sharing plans will be reviewed before the regional water strategies are developed. Isn't this a problem if the regional water strategy identifies issues that need to be addressed through changes to the water sharing plans?</p>	<p>A key role of regional water strategies is to consider the sequencing and integration of water resource planning and programs occurring across the region. Issues and strategies identified through the regional water strategies development will be considered in water sharing plan review where timing permits. Similarly, issues identified through water sharing plan reviews will be fed into regional water strategies development.</p> <p>Water sharing plans have a 10-year statutory timeframe for review, so their review cannot be delayed. However, processes are available that enable amendments to be made to water sharing plans within the 10-year time frame.</p>

## Specific issues raised

**Table 2. Specific Issues – Hunter Valley**

Issue	Response
<p>If there is a reduction in general security allocations, will there also be a reduction in groundwater allocations?</p>	<p>Under the water sharing plan rules, the Hunter Regulated River Alluvial Water Sources receive the same annual allocation as Regulated River High Security licences. The Hunter Unregulated and Alluvial water source allocations are not tied to general security allocations.</p>
<p>Councils have a mix of high security and general security allocations. What will the impacts be if there is a reduction in general security next year?</p>	<p>Allocations are based on licence categories. High security licences are given priority in the allocation of water and, in all but extreme years, receive full allocations. The nature of general security licences is that they are a less reliable licence and allocations can vary from year to year.</p> <p>In the Hunter, the water supply is managed with sufficient reserves held in storage to ensure maintenance of water supply, annually, through a repeat of the worst period of low inflows into the water source recorded to provide:</p> <ul style="list-style-type: none"> <li>● the Environmental Water Allowance of 20 GL</li> <li>● minimum daily flow targets</li> <li>● basic landholder rights and native title rights</li> <li>● 100% allocations for domestic and stock, local water utility and major water utility access licences</li> <li>● at least 75% allocations for high security access licences.</li> </ul>
<p>How can general security allocations go from 95% one year to 0% the following year?</p>	<p>The amount of water available to be allocated is dependent on a range of factors including dam storage levels, river flows, catchment conditions and assumptions on minimum inflows.</p> <p>Water behind the dam and the minimum inflow for next 12 months are first distributed among the higher priority users on 1 July. The remaining volume is then allocated to general security users. During the year if the storage does not receive any more than the minimum inflow then, with no new water, no general security allocation increase is possible.</p> <p>Hunter storages are experiencing record low inflows. When a valley moves from wet into a dry period, a fall in opening allocations is possible. Under the current water sharing plan rules, the department cannot withhold allocation to general security users in one year with a view to allocating more the next year. However, carryover provisions of up to 25% were introduced to provide general security licence holders with more flexibility in managing their allocations from year to year.</p> <p>A fact sheet on the Hunter allocations process and impacts of alternative allocation scenarios, as requested at the meeting can be found at:</p>

	<p><a href="http://www.industry.nsw.gov.au/water/allocations-availability/allocations/how-water-is-allocated/resource-assessment-process">www.industry.nsw.gov.au/water/allocations-availability/allocations/how-water-is-allocated/resource-assessment-process</a></p> <p>More information on how water is allocated is available on the departments website at:</p> <p><a href="http://www.industry.nsw.gov.au/water/allocations-availability/allocations/how-water-is-allocated">www.industry.nsw.gov.au/water/allocations-availability/allocations/how-water-is-allocated</a></p>
<p>Can general security allocations be reduced after they have been allocated at the beginning of the water year?</p>	<p>The department recognises that reducing allocations within the water year can have significant implications for water users. The approach is to make conservative opening allocations and then increase allocations if more water becomes available. Only in extreme events does the department consider suspending water in general security accounts.</p>
<p>WaterNSW released 20GL over three weeks so that bass could swim over the weirs. This was 5% of what was left in the dam. What was the rationale behind that?</p>	<p>The water sharing plan sets rules for the management of a 20 GL Environmental Contingency Allowance (ECA) in Glenbawn Dam and Glennies Creek Dam. This water is to be released to manage critical environmental events, such as algal blooms and chemical spills, and to provide flows at critical times for purposes such as fish migration and stony bed scouring.</p> <p>There were discussions and community consultation last year around using the ECA to provide the flows required for Australian Bass to migrate and spawn in June 2019. The seasonality of the flow event and water temperature are important aspects for successful spawning. However, the release was postponed and will be reconsidered for this winter (June 2020) if conditions are suitable.</p> <p>An Environmental Water Advisory Group has been established to consider the use of the ECA.</p>
<p>Has too much water been allocated?</p>	<p>Allocations are made as per the water sharing plan which secures high priority needs over the historical drought. Accordingly, high priority needs are secure for the length of historical drought and all carry over water to the next water year is available. Carryover provisions were introduced to provide general security licence holders with more flexibility in managing their allocations from year to year.</p> <p>In the vast majority of years, full general security allocations were available in the Hunter.</p> <p>Processes will be reviewed moving forward, in light of the record breaking conditions we have been experiencing.</p>
<p>Most farmers would prefer to have greater consistency of allocations between years rather than to go from 95% allocation to 0% the next.</p>	<p>Allocations are made consistently following the water sharing plan for all licence categories to provide certainty. There is no scope under the plan rules for not allocating available water when a licence holder is entitled to the volume.</p>

	<p>The water sharing plan provides an opportunity to water users to manage their risk by allowing carryover of unused general security allocation up to 25% of their entitlement to the following year and through trading of water allocations.</p> <p>The general security allocation for the subsequent year is dependent on additional inflow and any under-use, rather than prior allocations in that year.</p> <p>The carryover rules and historical minimum inflow considerations are prescribed in the water sharing plan. Amendment of the plan will require consultation with water users so that impacts on water users and environmental water holders are understood.</p>
<p>Is there a process in place in case there are further short falls moving forward?</p>	<p>There is no significant shortfall if historical minimum inflows eventuate. The routine water allocation statements published by the department include the latest estimate of the shortfalls.</p> <p>In drought periods, water reliant businesses should conserve and carryover water, or buy water from the market.</p>

**Table 3. Specific issues – Richmond River**

Issue	Response
<p>On the list of the water supply priorities for drought Stage 4, critical human needs and town water supply takes priority, but Toonumbar Dam doesn't supply water to any town, so why does it need to be considered?</p>	<p>Provision of basic landholder rights is considered a critical human need. Under the <i>Water Management Act 2000</i>, the department is obliged to consider all priorities, for all connected systems, even if they are not in the same water sharing plan area. For example, following recent rain events, access to water was restricted across the Northern Basin to provide access for the critical needs of the Lower Darling.</p>
<p>Toonumbar Dam has an Act of its own, which says it was primarily developed for irrigation, so what Act takes precedence over this for its usage?</p>	<p><i>Toonumbar Dam Act 1967</i> only related to the construction of the dam, not its ongoing operation. The water sharing plans prepared under the <i>Water Management Act 2000</i> define how water is shared for each water source.</p>
<p>Is WaterNSW involved in the operation of Rocky Creek Dam?</p>	<p>Rocky Creek Dam is operated by ROUS County Council. WaterNSW is not involved in its operation.</p>
<p>Where is the merit in having multiple organisations involved in water management?</p>	<p>Water management is a complex issue. As an outcome of the NSW Government reforms the responsibility for the management of water in regional NSW is now spread across four organisations:</p> <ul style="list-style-type: none"> <li>• DPIE-Water is responsible for planning, policy development and regulatory frameworks for regional water management.</li> <li>• Natural Resources Access Regulator (NRAR) is responsible for compliance with and enforcement of the regulatory frameworks for water including water management rules, and licence and approval conditions.</li> </ul>

	<ul style="list-style-type: none"> <li>• DPIE- Environment, Energy and Science manages environmental water within NSW.</li> <li>• WaterNSW is responsible for supplying the State's bulk water needs and operating the State's regulated rivers.</li> <li>• Local councils or local water supply authorities are responsible for providing most town water supply.</li> </ul>
When holding meetings with stakeholders, it is important to have all the responsible organisations in the room to stop the buck passing.	That is why these meetings involve presentations from a range of organisations. When WaterNSW first started holding River Operations Stakeholder Consultation Committee meetings, they were just focussed on regulated river users, but it quickly became evident they also needed to provide the opportunity for unregulated river users and groundwater pumpers to raise questions.
On the Alstonville Plateau, irrigation groundwater extraction is lumped in with the extraction that is happening for the bottled water industry. This is concerning as the growth in the bottled water industry could lead to over extraction. What has happened with the report released late last year on the impacts of bottled water on those groundwater resources?	<p>The NSW Chief Scientist and Engineer's final report - <i>Independent review of the impacts of the bottled water industry on groundwater resources in the Northern Rivers region of NSW</i> was released in October 2019. The report can be viewed at: <a href="http://www.chiefscientist.nsw.gov.au/_data/assets/pdf_file/0019/28504/0/Final-Report_Northern-Rivers-Bottled-Water-Review.pdf">www.chiefscientist.nsw.gov.au/_data/assets/pdf_file/0019/28504/0/Final-Report_Northern-Rivers-Bottled-Water-Review.pdf</a></p> <p>The NSW Government is currently preparing its response to that report.</p>
Will the regional water strategies prepared by DPIE Water use the same data set used by WaterNSW in assessing climate change risks and impacts on water availability?	DPIE Water and WaterNSW have hydrology branches that do their own hydrological modelling of water supply systems, but they have access to and use the same data sources where it is relevant to do so. The regional water strategies are planning for a much longer (20-40 year) period and are not using the last 120 years of historical rainfall and streamflow data, but an expanded data set covering 10 000 years and modelling climate change impacts with this.
How are regional water strategies areas defined? Are they catchment based?	Regional water strategy areas are based on catchments. Due to smaller catchment size, coastal regional water strategies will group together a number of catchments. For example, the Far North Coast regional water strategy region covers Tweed, Brunswick and Richmond catchments.
Where is agriculture considered in regional water strategies?	<p>Agriculture is considered under the "enable economic prosperity" objective of the regional water strategies. The other objectives of the strategies are:</p> <ul style="list-style-type: none"> <li>• deliver and manage water for local communities</li> <li>• recognise and protect Aboriginal cultural values and rights</li> <li>• protect and enhance the environment</li> <li>• affordability - identify least cost policy and infrastructure options.</li> </ul>
How much work has been done on the Far North Coast regional water strategy?	A draft of the strategy is due to be released in June 2020 for public consultation.

<p>Consultation with local government on the development of the regional water strategies, has at best been ad hoc. Will council have further opportunity for input before the draft regional water strategy is released?</p>	<p>The department is committed to developing regional water strategies in partnership with water service providers, local councils, communities, Aboriginal people and other stakeholders across NSW.</p> <p>The Far North Coast regional water strategy team has engaged local councils through targeted stakeholder meetings. It recently met with the Northern Rivers Joint Organisation of Councils General Managers to discuss the development of the strategy and agree to consultation arrangements going forward. The Far North Coast regional water strategy team will continue to talk with councils over the coming months as the draft strategy is developed, both individually and through the Joint Organisation of Councils.</p>
<p>In the Richmond Valley unregulated systems, there is a need to find alternative water sources for irrigators. Only 2% comes out for irrigation, but this is all concentrated in the periods of low flows. Identification of alternative water sources needs to be part of the drought strategy.</p>	<p>The regional water strategy is the opportunity to have discussions on how all water sources (surface water, groundwater, regulated and unregulated) are managed and future water supplies.</p>
<p>Under the water sharing plan our ability to pump from the tidal pools is tied to a salinity reading in parts per million, yet WaterNSW's real time database gives salinity levels in EC. There is no easy way to convert between the two measurements. Can anything be done about this, it is confusing for pumpers and compliance difficult (NB this issue was raised at the Richmond River ROSSCo earlier in the day).</p>	<p>WaterNSW real time database now provides salinity readings in both ppt and EC for some monitoring sites. In the Richmond River Basin these sites are:</p> <ul style="list-style-type: none"> <li>• 203403 Richmond River@Coraki</li> <li>• 203470 Richmondrv@Oaklandrd</li> </ul> <p>WaterNSW realtime database can be accessed at: <a href="http://realtimedata.watarnsw.com.au/">realtimedata.watarnsw.com.au/</a></p>

**Table 4. Specific issues – Bellinger River**

Issue	Response
<p>What are climate projections saying about future droughts on the North Coast?</p>	<p>The North Coast regional water strategy will provide an update on climate projections and impacts on water availability. Rather than just using 120 years of historical rainfall data, the regional water strategy will use an expanded data set covering 10 000 years and model climate change impacts with this. This data will underpin the development of the regional water strategies.</p>
<p>Bellingen has experienced almost running out of water, what can be done now to prepare for next time?</p>	<p>The Water Utilities team from DPIE Water works with local councils to undertake sustainable yield assessments to plan for water supply for towns. The regional water strategies will identify the long term (20-40 year) options for securing a region's water</p>

	<p>supply. The draft North Coast regional water strategy will go on public consultation later this year and the department is keen for input, especially with regards to options that may not have been identified in the draft.</p>
<p>Saline intrusion into groundwater lens creates water quality issues for local water utilities and agricultural use. There needs to be a better understanding of saline intrusion into groundwater sources.</p>	<p>The major water utility extracts groundwater from the alluvial aquifer. The borefield is in hydrogeological connection with the Bellinger River and above the tidal limit. However, this may be an issue for agricultural use.</p>
<p>As rainfall decreases, growers are becoming increasingly reliant on groundwater for production, but the water quality may not be suitable for susceptible crops. Do we understand how water quality is changing?</p>	<p>WaterNSW monitors the quality of groundwater sources and this data is available from the real time data from its website. Long term trends in changes in water quality are monitored.</p> <p>Above the tidal zone in the Bellinger River, groundwater quality impacts associated by pumping from upriver alluvium or the underlying New England Fold Belt are not expected as both groundwater sources are low salinity. The risk for a change in beneficial use categories is minimal as both are categorised at similar levels.</p> <p>DPI Agriculture provides information on its website on water quality and agricultural production at: <a href="http://www.dpi.nsw.gov.au/agriculture/irrigation/quality">www.dpi.nsw.gov.au/agriculture/irrigation/quality</a></p>
<p>The definition of tidal zones seems to have changed over time, where can we get more recent information on these?</p>	<p>For the purposes of water sharing, the 'tidal zone' refers to the reach of a river lying between the tidal limit and the mangrove limit. This definition has applied since the commencement of the first water sharing plans in 2003. The Manly Hydraulics Laboratory establishes the tidal and mangrove limits for coastal rivers in NSW. Maps prepared for coastal water sharing plans identify the tidal limit and the mangrove limit.</p> <p>Water sharing plan maps can be viewed on the NSW Legislation website at: <a href="http://www.legislation.nsw.gov.au/#/browse/inForce/regulations/W">www.legislation.nsw.gov.au/#/browse/inForce/regulations/W</a></p> <p>Select the relevant water sharing plan and then 'click' on the map icon to access the plan map.</p>
<p>Have many new groundwater bores been approved and where are they?</p>	<p>With the drying up of surface water resources there has been a significant increase in applications for groundwater bores for both basic landholder rights and commercial uses. The WaterNSW real time data website can assist in locating groundwater bores: <a href="https://realtimedata.waternsw.com.au/">https://realtimedata.waternsw.com.au/</a></p>
<p>I run 80 head of cattle. They use 10-20 000 L of water per week, should I be charged for this? Is there a better use of this water, say to grow plants to feed people rather than cattle?</p>	<p>In general terms basic landholder rights use (water that is pumped from a river adjacent to the property or from an aquifer below the property for household use and watering of grazing stock) does not make up a significant amount of water use when compared to the quantities required to irrigate crops. As such, water taken under basic landholder rights is not licensed and not subject to water charges - it however cannot be used for</p>

	irrigation. To irrigate crops requires a water access licence which is subject to water charges and has specific volume limits and pumping conditions.
Should we be looking at how we can capture more water during flood events and storing for use during droughts?	Future water supply needs and options will be considered as part of the regional water strategies.
Will the regional water strategies look at the role of on-farm storages in improving water security or only look at large scale, regional solutions?	This issue should be raised in consultation on the regional strategies.
How does population growth fit into water allocations? Areas on the coast such as Coffs Harbour are undergoing a population boom, how is this considered?	The regional water strategies will take population forecasts into consideration when modelling future water demands. The <i>Water Management Act 2000</i> allows the Minister to review and where necessary increase town water supply licences where population growth increases water demands.
As a landholder I am allowed to capture up to 10% of the rainfall run-off on my land. What happens if I want access to more water?	<p>If you want to capture more water you will need to have a water access licence. Information on harvestable rights is available from WaterNSW's website at: <a href="http://www.watersw.com.au/customer-service/water-licensing/basic-water-rights/harvestable-rights-dams">www.watersw.com.au/customer-service/water-licensing/basic-water-rights/harvestable-rights-dams</a>.</p> <p>Depending on your location, the water sources available to you could be either surface water or groundwater. These licences will have ongoing fees and charges.</p> <p>The 10% harvestable right for coastal areas is currently under review. An options paper is being developed and public consultation on this will take place later in 2020.</p>
As I have no dams and aren't capturing the 10% of the run-off water I'm entitled to, shouldn't someone be paying me for this water?	If you don't choose to capture your entitlement, there is no compensation. This water just becomes part of the wider water resource.
On the Dorrigo Plateau some private native forestry is currently being cleared. There is evidence that harvesting plantations in this area has impacts on water quality and water quantity. Local council should be able to stop this, but they can't.	Local Land Services are responsible for private native forestry advice and approvals. The NSW Environment Protection Authority is responsible for compliance and enforcement of private native forestry. For further information on private native forestry see: <a href="http://www.lls.nsw.gov.au/help-and-advice/private-native-forestry">www.lls.nsw.gov.au/help-and-advice/private-native-forestry</a>

### Locations – details

**Table 5. Meeting details**

<b>Date</b>	<b>Location</b>	<b>No of attendees</b>	<b>Groups represented</b>
27 February 2020	Singleton: Hunter/ Paterson Rivers	24	Singleton Council, Upper Hunter Shire Council, local business, farmers, consultants, media, electricity providers, landowners, Hunter Valley Water Users Association
10 March 2020	Casino: Richmond River	15	Richmond Valley Council, Ballina Shire Council, Lismore City Council, Richmond Wilson Combined Water Users Association, Beef and Pork Industry
10 & 11 March 2020	Bellingen: Bellingen River	15	Bellingen Environment Centre, Bellingen Landcare, Bellingen Shire Council